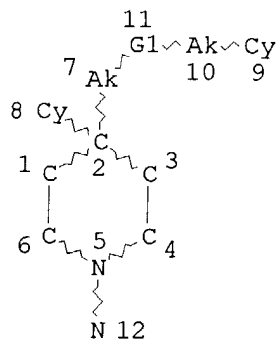


=> d l1
 L1 HAS NO ANSWERS
 L1 STR



VAR G1=O/S/N
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY UNS AT 8
 GGCAT IS MCY UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 2
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

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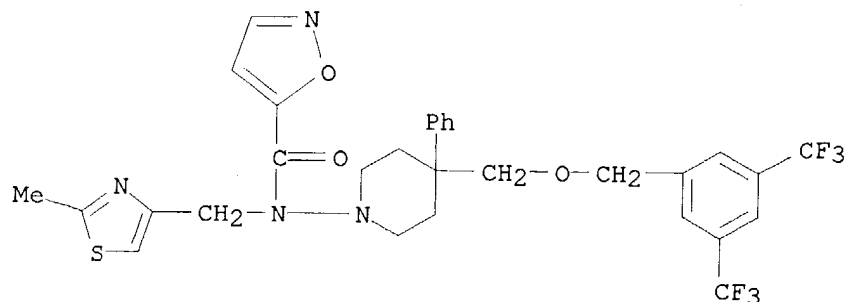
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 SEARCH TIME: 00.00.02

53 ANSWERS

L3 53 SEA SSS FUL L1

=> d scan

L3 53 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
 IN 5-Isoxazolecarboxamide, N-[4-[[[3,5-bis(trifluoromethyl)phenyl]methoxy]met
 hyl]-4-phenyl-1-piperidiny]-N-[(2-methyl-4-thiazolyl)methyl]- (9CI)
 MF C30 H28 F6 N4 O3 S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

157.10

157.31

FILE 'CAPLUS' ENTERED AT 15:17:58 ON 18 OCT 2004

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FILE COVERS 1907 - 18 Oct 2004 VOL 141 ISS 17

FILE LAST UPDATED: 17 Oct 2004 (20041017/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 1 L3

=> d bib abs

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:41271 CAPLUS

DN 140:93933

TI Preparation of 1-amido-4-phenyl-4-benzyloxymethylpiperidine derivatives and related compounds as neurokinin-1 (NK-1) antagonists for the treatment of emesis, depression, anxiety and cough

IN Shih, Neng-Yang; Wang, Steven; Reichard, Gregory A.; Xiao, Dong; Wang, Cheng

PA Schering Corporation, USA

SO PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004004722	A1	20040115	WO 2003-US20783	20030702
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NI, NO, NZ, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG

US 2004072867

A1

20040415

US 2003-612176

20030702

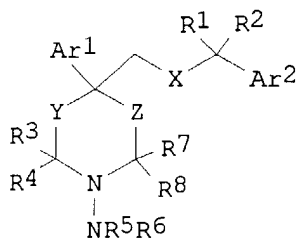
PRAI US 2002-393708P

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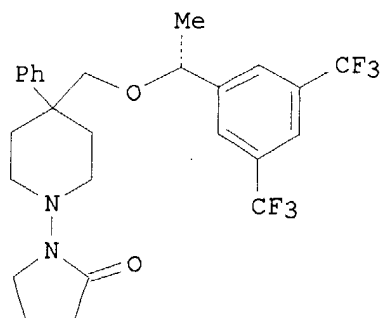
20020703

OS MARPAT 140:93933

GI



I

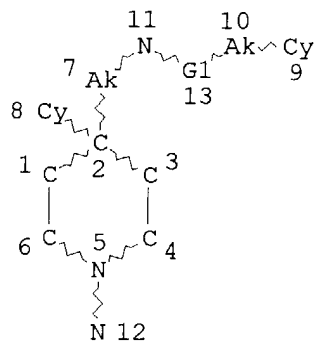


II

AB The title compds. of formula I [Ar1, Ar2 = (substituted) Ph, (substituted) heteroaryl; R1, R3 = H, alkyl, oxo; R2, R4 = H, (substituted) CONH2, etc.; R5, R6 = H, alkyl, cycloalkyl, aryl, etc.; R5R6 = heterocyclo ring, etc.; R7, R8 = H, alkyl, oxo; X = O, S, (substituted) NH, SO, SO2; Y = (CH2)m; Z = (CH2)n; m, n = 0-3 (m+n = 0-4)] are prepared as NK1 antagonists. The compds. are useful for treating disorders, symptoms or diseases, including emesis, depression, anxiety and cough. Thus, II was prepared, and had Ki of 0.3 nM in NK1 binding assay.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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 L5 HAS NO ANSWERS
 L5 STR



VAR G1=C/S
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY UNS AT 8
 GGCAT IS MCY UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 2
 NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

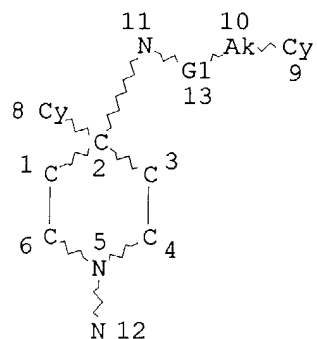
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100.0% PROCESSED 60212 ITERATIONS
 SEARCH TIME: 00.00.02

0 ANSWERS

L7 0 SEA SSS FUL L5

=> d 18
 L8 HAS NO ANSWERS
 L8 STR



VAR G1=C/S
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY UNS AT 8
 GGCAT IS MCY UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 2
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

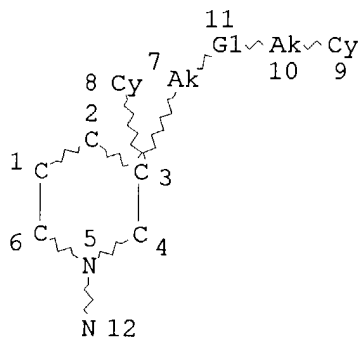
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100.0% PROCESSED 2606 ITERATIONS
 SEARCH TIME: 00.00.01

0 ANSWERS

L10 0 SEA SSS FUL L8

=> d l11
 L11 HAS NO ANSWERS
 L11 STR



VAR G1=O/S/N
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY UNS AT 8
 GGCAT IS MCY UNS AT 9
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RSPEC 3
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

=> s l11 ful
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 FULL SCREEN SEARCH COMPLETED - 58642 TO ITERATE

100.0% PROCESSED 58642 ITERATIONS
 SEARCH TIME: 00.00.01

0 ANSWERS

L13 0 SEA SSS FUL L11

=> s nk1(1)(cough or depression or anxiety or emesis)
 4616 NK1
 4305 COUGH
 70665 DEPRESSION
 12008 ANXIETY
 2448 EMESIS
 L1 273 NK1(L)(COUGH OR DEPRESSION OR ANXIETY OR EMESIS)

=> s l1(1)piperidin?
 87778 PIPERIDIN?
 L2 39 L1(L)PIPERIDIN?

=> s l2(1)pyrrol?
 130231 PYRROL?
 L3 9 L2(L)PYRROL?

=> d bib abs 1-9

L3 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:550949 CAPLUS
 DN 141:106497
 TI Preparation of substituted 1-piperidin-4-yl-4-azetidin-3-yl-piperazine
 derivatives and their use as neurokinin antagonists
 IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian
 Albert Ghislain; Leenaerts, Joseph Elisabeth
 PA Janssen Pharmaceutica N.V., Belg.
 SO PCT Int. Appl., 52 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056800	A1	20040708	WO 2003-EP51042	20031217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI WO 2002-EP14837	A	20021223		
OS MARPAT 141:106497				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1
 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = Ar2, Ar2-alkyl,
 di(Ar2)-alkyl Het1, Het1-alkyl; R3 independently = H or alkyl; Y =
 covalent bond, -CO-, -SO2-, >C:CHR or >C:NR, wherein R = H, CN or NO2; M
 independently = covalent bond, (un)substituted-alkyl, -(un)saturated
 carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 =
 (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with

substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from **pyrrolyl**, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts having neurokinin antagonistic activity, in particular **NK1** antagonistic activity and **NK1/NK3-** antagonistic activity, their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of schizophrenia, **emesis**, **anxiety**, **depression**, irritable bowel syndrome (IBS), circadian rhythm disturbances, pain, neurogenic inflammation, asthma, micturition disorders such as urinary incontinence and nociception are disclosed. Thus, e.g., II was prepared by reaction of (2R-trans)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl) **piperidine** (preparation given) with 1-(diphenylmethyl)-3-azetidiny methanesulfonate. For selected compds. of the invention, receptor binding pIC50 values for h-**NK1** were in a range from 6.69-8.13. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P by blocking the NK receptors, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin mediated conditions, such as, for instance CNS disorders, in particular **depression**, **anxiety** disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, schizoaffective disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS related conditions ; inflammation ; allergic disorders ; **emesis** ; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders ; vasospastic diseases ; fibrosing and collagen diseases ; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:550948 CAPLUS
DN 141:106496
TI Preparation of substituted 1-piperidin-4-yl-4-pyrrolidin-3-yl-piperazine derivatives and their use as neurokinin antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian
Albert Ghislain; Leenaerts, Joseph Elisabeth
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

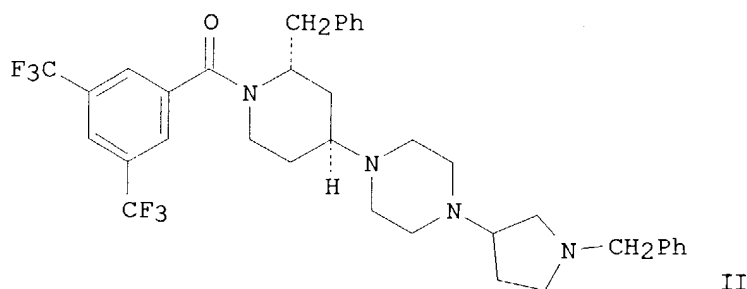
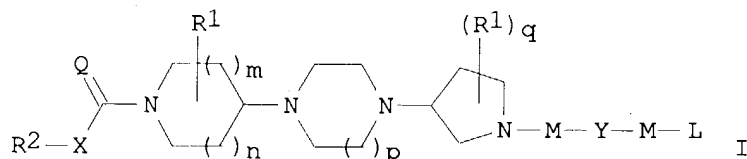
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PI	WO 2004056799	A2	20040708	WO 2003-EP51041	20031217
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	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,			

MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

PRAI WO 2002-EP14831 A 20021223

OS MARPAT 141:106496

GI



AB Title compds. I [Q = O or NR₃; X = covalent bond, -O-, -S-, or -NR₃; R₁ independently = Ar₁, Ar₁-alkyl, and di(Ar₁)-alkyl; R₂ = Ar₂, Ar₂-alkyl, di(Ar₂)-alkyl, Het₁, Het₁-alkyl; R₃ independently = H or alkyl; Y = covalent bond, -CO-, -SO₂-, >C:CHR or >C:NR, wherein R = H, CN or NO₂; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar₃oxy, alkylamine, etc.; Ar₁ = (un)substituted phenyl; Ar₂ = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar₃ = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het₁ = monocyclic heterocyclic radical selected from **pyrrolyl**, **pyrazolyl**, **imidazolyl**, **furanyl**, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts having neurokinin antagonistic activity, in particular **NK1** antagonistic activity, a combined **NK1/NK3** antagonistic activity and a combined **NK1/NK2/NK3** antagonistic activity, their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of schizophrenia, **anxiety**, **depression**, **emesis** and IBS are disclosed. Thus, e.g., II was prepared by reaction of (2R-trans) 1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl)**piperidine** (preparation given) and 1-(phenylmethyl)-3-**pyrrolidinone**. The receptor binding values (pIC₅₀) for the h-**NK1** ranges for all compds. according to the invention between 10 and 6. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P and Neurokinin B by blocking the **NK1**, **NK2** and **NK3** receptors, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular schizoaffective disorders, **depression**, **anxiety** disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, eating disorders, neurodegenerative diseases,

addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions ; inflammation ; allergic disorders ;
emesis ; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders ; vasospastic diseases ; fibrosing and collagen diseases ; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

L3 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2004:550876 CAPLUS
 DN 141:106495
 TI Substituted 1-piperidin-3-yl-4-piperidin-4-yl-piperazine derivatives and their use as neurokinin antagonists
 IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian
 Albert Ghislain; Leenaerts, Joseph Elisabeth
 PA Janssen Pharmaceutica N.V., Belg.
 SO PCT Int. Appl., 77 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

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PI	WO 2004056364	A1	20040708	WO 2003-EP51035	20031217
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	RW:				
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PRAI	WO 2002-EP14835	A	20021223		
OS	MARPAT 141:106495				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [Q = O or NR3; X = covalent bond, -O-, -S-, or -NR3; R1 independently = Ar1, Ar1-alkyl, and di(Ar1)-alkyl; R2 = Ar2, Ar2-alkyl, di(Ar2)-alkyl Het1, Het1-alkyl; R3 independently = H or alkyl; Y = covalent bond, -CO-, -SO2-, >C:CHR or >C:NR, wherein R = H, CN or NO2; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar3oxy, alkylamine, etc.; Ar1 = (un)substituted phenyl; Ar2 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar3 = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het1 = monocyclic heterocyclic radical selected from **pyrrolyl**, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts having neurokinin antagonistic activity, in particular **NK1** antagonistic activity, a combined **NK1/NK3** antagonistic activity and a combined **NK1/NK2/NK3** antagonistic activity, their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of schizophrenia, **emesis**, **anxiety** and **depression**, irritable bowel syndrome (IBS), circadian rhythm

disturbances, visceral pain, neurogenic inflammation, asthma, micturition disorders such as urinary incontinence and nociception are disclosed. Thus, e.g., II was prepared via reaction of (2R-trans)-1-[3,5-bis(trifluoromethyl)benzoyl]-2-(phenylmethyl)-4-(1-piperazinyl) **piperidine** (preparation given) with 1-(phenylmethyl)-3-**piperidinone**. The receptor binding values (pIC50) for the h-**NK1** ranges for all compds. according to the invention between 10 and 6. In view of their capability to antagonize the actions of tachykinins by blocking the neurokinin receptors, and in particular antagonizing the actions of substance P, Neurokinin A and Neurokinin B by blocking the **NK1**, NK2 and NK3 receptors, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular schizoaffective disorders, **depression**, **anxiety** disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; **emesis**; gastrointestinal disorders, in particular irritable bowel syndrome (IBS); skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2004:546478 CAPLUS
DN 141:89116
TI Preparation of substituted 1,4-di-piperidin-4-yl-piperazine derivatives and their use as tachykinin antagonists
IN Janssens, Frans Eduard; Sommen, Francois Maria; De Boeck, Benoit Christian Albert Ghislain; Leenaerts, Joseph Elisabeth; Van Roosbroeck, Yves Emiel Maria
PA Janssen Pharmaceutica N.V., Belg.
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004056772	A1	20040708	WO 2002-EP14836	20021223
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	WO 2004033428	A1	20040422	WO 2003-EP50697	20031007
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG

PRAI WO 2002-EP11328 A 20021008

WO 2002-EP14836 A 20021223

OS MARPAT 141:89116

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Tile compds. I [Q = O or NR₃; X = covalent bond, -O-, -S-, or -NR₃; R₁ independently = Ar₁, Ar₁-alkyl, and di(Ar₁)-alkyl; R₂ = alkyl, Ar₂, Ar₂-alkyl, Het₁, Het₁-alkyl; R₃ independently = H or alkyl; Y = covalent bond, CO, SO₂; M independently = covalent bond, (un)substituted-alkyl, -(un)saturated carbocycle; L = H, alkyloxy, Ar₃oxy, alkylamine, etc.; Ar₁ = (un)substituted phenyl; Ar₂ = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, aminocarbonyl, and alkyloxy; Ar₃ = (un)substituted naphthalenyl or Ph with substituent(s) selected from halo, alkyl, CN, amino, alkyloxy, OH, pyridinyl, etc.; Het₁ = monocyclic heterocyclic radical selected from **pyrrolyl**, pyrazolyl, imidazolyl, furanyl, etc.; m = 1 or 2 provided that if m = 2, then n = 1; n = 0-2; p = 1-2; q = 0-1] and their pharmaceutically acceptable salts are disclosed as having tachykinin antagonistic activity, in particular **NK1** antagonistic activity. Their preparation, compns. comprising them and their use as a medicine, in particular for the treatment of **emesis, anxiety, depression** and irritable bowel syndrome (IBS) are disclosed. Thus, II was prepared via resolution of III (preparation given), de-N-benzylation, and reaction with 1-(phenylmethyl)-4-**piperidinone**. Selected compds. of the invention were evaluated for binding to h-**NK1**, h-**NK2**, and h-**NK3** receptors with all compds. showing (sub)nanomolar affinity for h-**NK1** with most possessing more than 100-fold selectivity towards the h-**NK2** and h-**NK3** receptors. In view of their capability to antagonize the actions of tachykinins by blocking the tachykinin receptors, and in particular antagonizing the actions of substance P by blocking the **NK1** receptor, the compds. according to the invention are useful as a medicine, in particular in the prophylactic and therapeutic treatment of tachykinin-mediated conditions, such as, for instance CNS disorders, in particular **depression, anxiety** disorders, stress-related disorders, sleep disorders, cognitive disorders, personality disorders, schizoaffective disorders, eating disorders, neurodegenerative diseases, addiction disorders, mood disorders, sexual dysfunction, pain and other CNS-related conditions; inflammation; allergic disorders; **emesis**; gastrointestinal disorders, in particular IBS; skin disorders; vasospastic diseases; fibrosing and collagen diseases; disorders related to immune enhancement or suppression and rheumatic diseases and body weight control.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:491186 CAPLUS

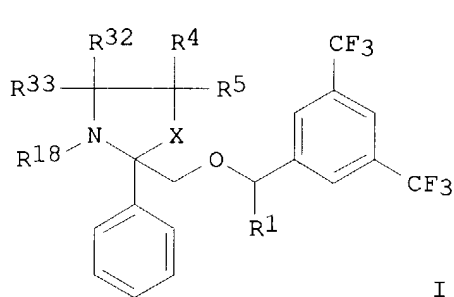
DN 139:69145

TI Preparation of pyrrolidine and piperidine derivatives for therapeutic use as neurokinin 1 (NK1) receptor antagonists

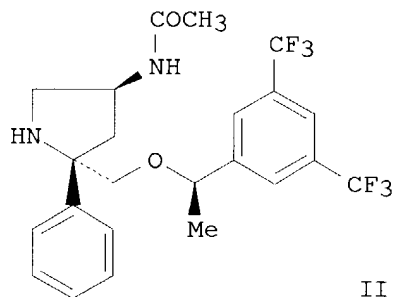
IN Paliwal, Sunil; Reichard, Gregory A.; Wang, Cheng; Xiao, Dong; Tsui, Hon-Chung; Shih, Neng-Yang; Arredondo, Juan D.; Wroblewski, Michelle Laci; Palani, Anandan

PA Schering Corporation, USA
 SO PCT Int. Appl., 133 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003051840	A1	20030626	WO 2002-US40203	20021217
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003158173	A1	20030821	US 2002-321687	20021217
	EP 1463716	A1	20041006	EP 2002-805167	20021217
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
PRAI	US 2001-341452P	P	20011218		
	WO 2002-US40203	W	20021217		
OS	MARPAT 139:69145				
GI					



I



II

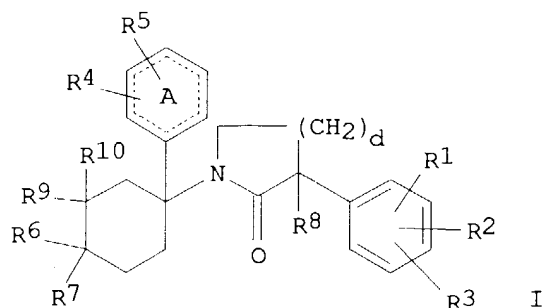
AB **Pyrrolidine and piperidine** derivs., such as I [X = (CR₆R₇)_n; n = 1, 2; R₁ = H, alkyl, etc.; R₄, R₅, R₆, R₇, R₃₂, R₃₃ = H or radical, such as amino, alkyl, alkoxy, acyl, or heterocyclyl; R₄R₅ = :O, oxime, spiro bonded nitrogen containing ring, etc.], were prepared for use in pharmaceutical compns. as **NK1** receptor antagonists. These **pyrrolidine and piperidine** derivs. are intended for use in the treatment of a number of disorders, including **emesis, depression, anxiety, respiratory disease, cough**, inflammatory disease, skin disorder, ophthalmological disorder, **depression, anxiety, phobia, bipolar disorder, alc.** dependence, psychoactive substance abuse, epilepsy, nociception, psychosis, schizophrenia, Alzheimer's disease, AIDS related dementia, Towne's disease, stress related disorder, obsessive/compulsive disorder, bulimia, anorexia nervosa, binge eating, mania, premenstrual syndrome, gastrointestinal disorder, atherosclerosis, fibrosing disorder, obesity, Type II diabetes, headache, neuropathic pain, postoperative pain, chronic pain syndrome, bladder disorder, genitourinary disorder or migraine. Thus, **pyrrolidine** derivative II was prep'd via a multistep synthetic sequence which began with an alkylation reaction of (2R,4S)-5-oxo-2,4-diphenyl-3-oxazolidinecarboxylic acid phenylmethyl ester with

1-[(1R)-1-(bromomethoxy)ethyl]-3,5-bis(trifluoromethyl)benzene. The prepared **pyrrolidine** and **piperidine** derivs. were tested for **NK1** receptor binding activity.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:977652 CAPLUS
DN 138:55871
TI Preparation of gem-disubstituted cyclohexane-containing azetidinones, pyrrolidinones and piperidinones as neurokinin 1 receptor antagonists and their use as therapeutic agents
IN Castro Pineiro, Jose Luis; Dinnell, Kevin; Elliott, Jason Matthew; Hollingworth, Gregory John; Shaw, Duncan Edward; Swain, Christopher John
PA Merck Sharp & Dohme Limited, UK
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002102372	A1	20021227	WO 2002-GB2654	20020610
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM	
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
	US 2004171642	A1	20040902	US 2003-481477	20031217
PRAI	GB 2001-14867	A	20010618		
	WO 2002-GB2654	W	20020610		
OS	MARPAT 138:55871				
GI					



AB The present invention relates to gem-disubstituted cyclohexane-containing azetidinones, **pyrrolidinones** and **piperidinones** (shown as I; e.g. 3-[3,5-bis(trifluoromethyl)phenyl]-1-(1,4-dioxo-8-phenylspiro[4.5]decan-8-yl)-2-**piperidinone**; R1, R2, R3, R4, R5, R6, R7, R8, R9 and R10 = a variety of substituents; ring A is a Ph or pyridyl ring; d is 0-2) and pharmaceutically acceptable salts and N-oxides thereof. The compds. are of particular use in the treatment or prevention of **depression**, **anxiety**, pain, inflammation, migraine, **emesis** or post-therapeutic neuralgia. The compds. are active with

IC50 at the **NK1** receptor of <100nM on said test method. In the treatment of the conditions associated with an excess of tachykinins, a suitable dosage level is .apprx.0.001-50 mg/kg per day, in particular .apprx.0.01 to .apprx.25 mg/kg, such as from .apprx.0.05 to .apprx.10 mg/kg per day. For example, in the treatment of conditions involving the neurotransmission of pain sensations, a suitable dosage level is .apprx.0.001-25 mg/kg per day, preferably .apprx.0.005-10 mg/kg per day, and especially .apprx.0.005-5 mg/kg per day. In the treatment of **emesis** or psychiatric disorders, a suitable dosage level is .apprx.0.001-10 mg/kg per day, preferably .apprx.0.005-5 mg/kg per day, and especially 0.01-3 mg/kg per day. The compds. may be administered on a regimen of 1-4 times per day, preferably once or twice per day. Although the methods of preparation are not claimed, 26 example intermediate and 23 example claimed compound prepn. are included.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:753212 CAPLUS
DN 132:3369
TI Carboxy substituted carboxamide derivatives as tachykinin receptor antagonists
IN Burkholder, Timothy P.; Maynard, George L.; Kudlacz, Elizabeth M.
PA Hoechst Marion Roussel, Inc., USA
SO PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9959972	A1	19991125	WO 1999-US9450	19990430
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2329075	AA	19991125	CA 1999-2329075	19990430
	AU 9937756	A1	19991206	AU 1999-37756	19990430
	AU 743487	B2	20020124		
	EP 1077942	A1	20010228	EP 1999-920201	19990430
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002515487	T2	20020528	JP 2000-549591	19990430
	NZ 507432	A	20030829	NZ 1999-507432	19990430
	CN 1136190	B	20040128	CN 1999-806189	19990430
	US 6316445	B1	20011113	US 1999-648005	19990506
	NO 2000005756	A	20010112	NO 2000-5756	20001114
	ZA 2000006606	A	20020214	ZA 2000-6606	20001114
PRAI	US 1998-79610	A	19980515		
	US 1998-126447P	P	19980515		
	WO 1999-US9450	W	19990430		
OS	MARPAT 132:3369				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to novel carboxy-substituted acyclic carboxamide derivs. of formula I, and stereoisomers and pharmaceutically acceptable salts thereof, as well as their use as tachykinin receptor antagonists [wherein R1 = 1-3 of H, halo, C1-6 alkyl or alkoxy; R2 = H, 4H-1,2,4-triazol-4-yl, or 1H-tetrazol-1-yl bearing optional CF3 or C1-4 alkyl in 5-position; Ar1 = (un)substituted Ph, naphthyl, pyridyl, or thienyl; Ar2 = (un)substituted Ph or pyridyl; X = carboxy-bearing derivs. of **pyrrolidino**, **piperidino**, morpholino, or piperazino, or their C1-6 alkyl esters]. Such antagonists are useful in the treatment of tachykinin-mediated diseases and conditions disclosed herein, including in particular asthma, **cough**, and bronchitis. For example, the title compound II was prepared by reductive amination of the aldehyde III by **piperidine** derivative IV.HI using NaBH3CN in MeOH. The intermediates III and IV were prepared in sequences of 8 and 2 steps, resp. The HCl salt of II inhibited binding of radioligands to **NK1** and NK2 receptors with IC50 values of 23 nM and 178 nM, resp.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:424246 CAPLUS
DN 129:95499
TI Novel heterocyclic substituted pyrrolidine amide derivatives useful as tachykinin receptor antagonists
IN Burkholder, Timothy P.; Maynard, George D.; Kudlacz, Elizabeth M.
PA Hoechst Marion Roussel, Inc., USA
SO PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9827086	A1	19980625	WO 1997-US19884	19971103
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9851607	A1	19980715	AU 1998-51607	19971103
	AU 723966	B2	20000907		
	EP 946548	A1	19991006	EP 1997-946443	19971103
	EP 946548	B1	20020306		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	CN 1241185	A	20000112	CN 1997-180825	19971103
	CN 1119344	B	20030827		
	BR 9714057	A	20000509	BR 1997-14057	19971103
	NZ 335975	A	20001124	NZ 1997-335975	19971103
	JP 2001506650	T2	20010522	JP 1998-527682	19971103
	AT 214063	E	20020315	AT 1997-946443	19971103
	PT 946548	T	20020628	PT 1997-946443	19971103
	ES 2169881	T3	20020716	ES 1997-946443	19971103
	CA 2275527	C	20030923	CA 1997-2275527	19971103
	ZA 9711271	A	19980619	ZA 1997-11271	19971215
	TW 486477	B	20020511	TW 1997-86119004	19971216
	NO 9903013	A	19990818	NO 1999-3013	19990618
	KR 2000057668	A	20000925	KR 1999-705496	19990618

HK 1020947	A1	20020816	HK 1999-106022	19991221
PRAI US 1996-769812	A	19961219		
WO 1997-US19884	W	19971103		
OS MARPAT 129:95499				
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to novel heterocyclic substituted **pyrrolidine** amide derivs. I and stereoisomers and pharmaceutically acceptable salts thereof [wherein R1 = 1-3 of H, halo, CF3, alkyl, alkoxy; R2 = H, alkyl, alkoxy; R3 = 1-tetrazolyl or its 5-alkyl or 5-CF3 derivs., 1,2,4-triazol-4-yl; Ar = C6H4R5 or -pyridyl-R6; R5 = 1-3 of H, halo, CF3, alkyl, or alkoxy; R6 = 1-2 of H, halo, alkyl, or alkoxy; R7, R8 = H; or NR7R8 = **piperidine**, morpholine, piperazine, 4-methylpiperazine, or **pyrrolidine** ring]. As tachykinin receptor antagonists, the compds. are useful in the treatment of tachykinin-mediated diseases and conditions, including particularly asthma, **cough**, and bronchitis. For instance, the salt of (S)-3-(3,4-dichlorophenyl)-3-(2-hydroxyethyl)**pyrrolidine** with (R,R)-di-p-anisoyltartaric acid underwent a sequence of N-protection as the BOC derivative, O-mesylation, coupling of the mesylate with 4-phenylpiperidine-4-carboxylic acid amide hydrochloride, N-deprotection, amidation with 2-methoxy-5-(1H-tetrazol-1-yl)benzoic acid, and acidification, to give title compound II as the hydrochloride. The latter bound to **NK1** and **NK2** receptors in vitro with IC50 values of 2.79 nM and 16.3 nM, resp. This compound showed both higher **NK1** selectivity and higher metabolic stability in comparison to a known compound of similar structure.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1998:424245 CAPLUS
DN 129:95498
TI Novel heterocyclic carboxy-substituted cyclic carboxamide derivatives useful as tachykinin receptor antagonists
IN Burkholder, Timothy P.; Maynard, George D.; Kudlacz, Elisabeth M.
PA Hoechst Marion Roussel, Inc., USA
SO PCT Int. Appl., 214 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9827085	A1	19980625	WO 1997-US21586	19971121
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	US 5977139	A	19991102	US 1997-971891	19971117
	AU 9853627	A1	19980715	AU 1998-53627	19971121
	AU 718984	B2	20000504		
	EP 946545	A1	19991006	EP 1997-950690	19971121
	EP 946545	B1	20010905		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

CN 1240443	A	20000105	CN 1997-180774	19971121
CN 1098259	B	20030108		
BR 9714156	A	20000208	BR 1997-14156	19971121
NZ 335883	A	20010727	NZ 1997-335883	19971121
AT 205200	E	20010915	AT 1997-950690	19971121
ES 2162686	T3	20020101	ES 1997-950690	19971121
PT 946545	T	20020228	PT 1997-950690	19971121
JP 2002512596	T2	20020423	JP 1998-527720	19971121
RU 2199535	C2	20030227	RU 1999-115883	19971121
CA 2275602	C	20030722	CA 1997-2275602	19971121
EE 4117	B1	20030815	EE 1999-254	19971121
ZA 9711264	A	19980623	ZA 1997-11264	19971215
TW 544452	B	20030801	TW 1997-86119362	19971219
NO 9903012	A	19990818	NO 1999-3012	19990618
KR 2000057667	A	20000925	KR 1999-705495	19990618
HK 1020571	A1	20020517	HK 1999-105551	19991130
PRAI US 1996-794157	A	19961219		
US 1997-971891	A	19971117		
WO 1997-US21586	W	19971121		
OS MARPAT 129:95498				
GI				

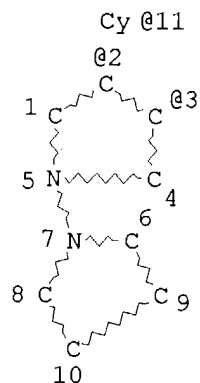
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to novel carboxy-substituted cyclic carboxamide derivs. I and stereoisomers and pharmaceutically acceptable salts thereof [wherein either G1 or G2 = CH₂, while other = CO; m = 2 or 3; n = 0 or 1; R1 = 1-3 of H, halo, CF₃, alkyl, alkoxy; R2 = 1-3 of H, halo, cyano, CF₃, alkyl, alkoxy; R3 = 1-tetrazolyl or its 5-alkyl or 5-CF₃ derivs., 1,2,4-triazol-4-yl, 1H-tetrazol-5-yl; Ar = (un)substituted Ph or pyridyl; A = carboxy- or carboxy-derivative-substituted **pyrrolidino**, **piperazino**, **morpholino**, **thiomorpholino** or **oxides**, or **piperidino**]. As tachykinin receptor antagonists, the compds. are useful in the treatment of tachykinin-mediated diseases and conditions, including particularly asthma, **cough**, and bronchitis. For instance, (S)-3-(3,4,5-trimethoxybenzoyl)-3-(3,4-dichlorophenyl)-3-(2-methanesulfonyloxyethyl)**pyrrolidine** was condensed with 4-phenyl-4-[[(S)-2-carbomethoxypyrrolidin-1-yl]carboxamido] **piperidine** hydriodide to give title compound II. The latter bound to **NK1** and **NK2** receptors in vitro with IC₅₀ values of 4.32 nM and 4.51 nM, resp.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 4 7
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

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FULL SEARCH INITIATED 15:38:03 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8685 TO ITERATE

100.0% PROCESSED 8685 ITERATIONS 25 ANSWERS
SEARCH TIME: 00.00.01

L5 25 SEA SSS FUL L3

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COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
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. FILE LAST UPDATED: 17 Oct 2004 (20041017/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 15

L6 14 L5

L6 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:208378 CAPLUS
 DN 134:258984
 TI Fluorescent maleimides and uses thereof
 IN Kunimoto, Kazuhiko; Otani, Junji; Kodama, Kunihiro; Yamamoto, Hiroshi;
 Verhoustraeten, Patrick; Megert, Sonia; Braig, Adalbert
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 93 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001019939	A1	20010322	WO 2000-EP8751	20000907
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6258954	B1	20010710	US 2000-643594	20000822
BR 2000014089	A	20020521	BR 2000-14089	20000907
EP 1216285	A1	20020626	EP 2000-965940	20000907
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003509441	T2	20030311	JP 2001-523711	20000907
US 2002065422	A1	20020530	US 2001-861950	20010521
US 6508957	B2	20030121		
US 2003189191	A1	20031009	US 2002-268493	20021010
PRAI EP 1999-810826	A	19990916		
US 2000-643594	A3	20000822		
WO 2000-EP8751	W	20000907		
US 2001-861950	A3	20010521		

OS MARPAT 134:258984

AB Maleimide derivs. and methods for producing them by reacting maleic anhydride derivative and an amine are described. Use of maleimide derivs. as UV fluorescent materials for void detection and for the preparation of scintillator films, luminescent solar energy collectors, organic electroluminescent devices, printing inks, non-impact printing inks, electrophotog. toners, color filters, and colored high mol. organic materials is also described.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1999:474298 CAPLUS
 DN 131:242780
 TI Electrophilic and Nucleophilic Reactivities of the Azomethine Carbon of SAMP-Hydrazones: Stereoselective Synthesis of γ -Amino Ketone Derivatives
 AU Enders, Dieter; Diez, Elena; Fernandez, Rosario; Martin-Zamora, Eloisa; Munoz, Jesus M.; Pappalardo, Rafael R.; Lassaletta, Jose M.
 CS Departamento de Quimica Organica, Universidad de Sevilla, Seville, E-41071, Spain
 SO Journal of Organic Chemistry (1999), 64(17), 6329-6336
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society

DT Journal
LA English
OS CASREACT 131:242780
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A novel methodol. for the asym. synthesis of secondary N-Boc-protected γ -amino ketones is described. Hydrazones such as I (RR1 = O), prepared from the diastereoselective addition of the SAMP-hydrazone of formaldehyde [SAMP = (S)- α -methoxymethylpyrrolidinyl] to α,β -unsatd. ketones, are converted to ethylene ketals such as I (RR1 = OCH₂CH₂O). Diastereoselective addition of either methyllithium or methylmagnesium bromide to hydrazones such as I gives unstable hydrazines which may either be acylated with methoxycarbonyl chloride to provide hydrazines such as II in 62-81% yields and 62-93% de, or which may be reduced with Raney nickel in methanol and acylated with Boc anhydride to give Boc-protected amines such as III in 30-75% yields and >3:1 diastereoselectivities. E.g., addition of methyllithium to I (RR1 = OCH₂CH₂O) at -78° in THF followed by acylation with MeOCOC₂Cl gives the protected hydrazine II in 65% yield and as a 94:6 ratio of diastereomers. E.g., addition of methyllithium to I (RR1 = OCH₂CH₂O) in THF, reductive cleavage of the hydrazine with Raney nickel in methanol, and protection of the free amine with Boc anhydride and triethylamine in methanol gives III in 65% yield and as a 93:7 mixture of diastereomers. The azomethine carbon of SAMP-hydrazones, not being essentially modified during the process, sequentially serves as a nucleophilic and an electrophilic center, acting as a nexus between the conjugated enone (electrophile) and the organometallic reagent (nucleophile) and helping in the creation of two adjacent stereogenic centers. Chalcone derivs. such as IV are not effective in this transformation, undergoing acid-catalyzed cyclization instead of ketal formation to give pyrrole derivs. such as V. IV was cleaved with 1,2-ethanedithiol and boron trifluoride etherate to give ketal VI in 90% yield. Complexes of starting methyllithium complexes with SAMP hydrazones, a proposed transition state, and a product complex are modeled by ab initio calcs.

RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:523272 CAPLUS

DN 127:255115

TI Magnetic field effect on photochromism. Recombination of 2,3,4,5-tetraphenylpyrrolyl radicals

AU Nakai, Takako; Tani, Masanao; Nishio, Satoru; Matsuzaki, Akiyoshi; Sato, Hiroyasu

CS Department of Chemistry for Materials, Faculty of Engineering, Mie University, Tsu, 514, Japan

SO Chemistry Letters (1997), (8), 795-796

CODEN: CMLTAG; ISSN: 0366-7022

PB Chemical Society of Japan

DT Journal

LA English

AB Photochromism of the dimer of 2,3,4,5-tetraphenylpyrrolyl radical consists of coloration by photochem. scission and decoloration by thermal recombination of radicals. Application of external magnetic field gave a pronounced retarding effect on the second-order recombination rate constant of escaped radicals.

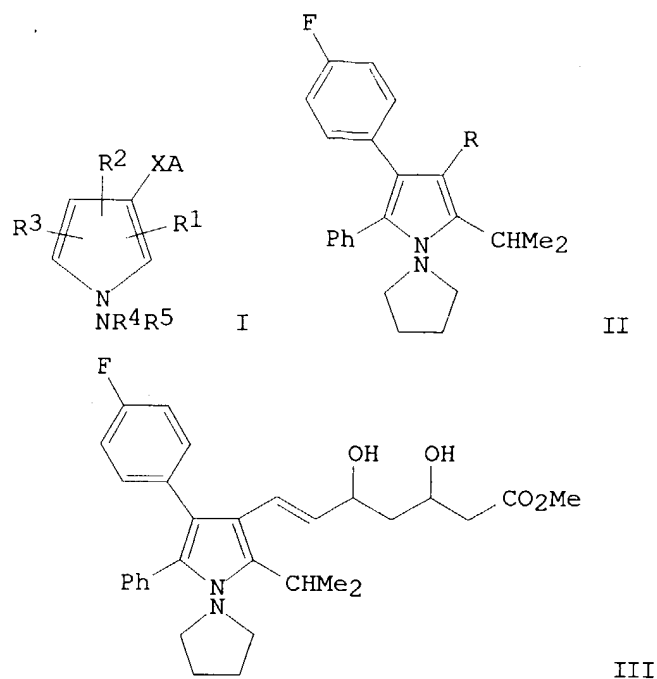
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1996:53076 CAPLUS
 DN 124:201933
 TI Synthetic Application of Monoprotected Hydrazines toward the Synthesis of
 1-Aminopyrroles
 AU McLeod, Matt; Boudreault, Nicolas; Leblanc, Yves
 CS Merck Frosst Centre for Therapeutic Research, Pointe Claire-Dorval, QC,
 H9R 4P8, Can.
 SO Journal of Organic Chemistry (1996), 61(3), 1180-3
 CODEN: JOCEAH; ISSN: 0022-3263
 PB American Chemical Society
 DT Journal
 LA English
 AB Monoprotected hydrazines were condensed with 1,4-dicarbonyl compds. to
 provide protected 1-aminopyrroles. The hydrazides were then deprotected,
 under very mild conditions, to provide 1-aminopyrroles. Unsym.
 1,1'-bipyrroles and pyrrolylaminopiperidines were then prepared from these
 1-aminopyrroles.

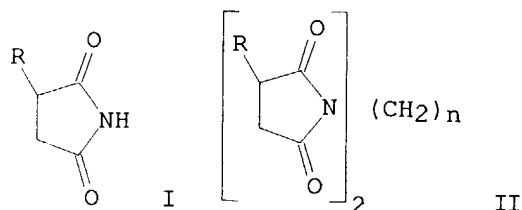
L6 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1990:515074 CAPLUS
 DN 113:115074
 TI Preparation of 5-[(1-piperidinopyrrol-3-yl)vinyl]mevalonates and analogs
 as HMG-CoA reductase inhibitors
 IN Angerbauer, Rolf; Huebsch, Walter; Fey, Peter; Bischoff, Hilmar; Petzinna,
 Dieter; Schmidt, Delf; Thomas, Guenter
 PA Bayer A.-G., Fed. Rep. Ger.
 SO Eur. Pat. Appl., 55 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 339342	A1	19891102	EP 1989-106241	19890408
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	DE 3813776	A1	19891102	DE 1988-3813776	19880423
	NO 8901480	A	19891024	NO 1989-1480	19890411
	US 4988711	A	19910129	US 1989-337001	19890412
	AU 8933123	A1	19891026	AU 1989-33123	19890418
	FI 8901892	A	19891024	FI 1989-1892	19890420
	JP 01313460	A2	19891218	JP 1989-100322	19890421
	ZA 8902948	A	19891227	ZA 1989-2948	19890421
	DD 283808	A5	19901024	DD 1989-327859	19890421
	HU 53609	A2	19901128	HU 1989-1941	19890421
	CN 1037145	A	19891115	CN 1989-102670	19890422
	DK 8901963	A	19891024	DK 1989-1963	19890424
PRAI	DE 1988-3813776		19880423		
	IT 1988-22264		19881011		
OS	CASREACT 113:115074; MARPAT 113:115074				
GI					



AB The title compds. [I; A = CH(OH)CH₂CR₁₀(OH)CH₂CO₂R₁₁; R₁ = cycloalkyl, (un)substituted alkyl; R₂ = (un)substituted aryl, heteroaryl; R₃-R₅ = H, cycloalkyl, (un)substituted alkyl, aryl, heteroaryl; NR₄R₅ = heterocyclyl; R₁₀ = H, alkyl; R₁₁ = H, alkyl, aryl, aralkyl, cation; X = CH₂CH₂, CH:CH] were prepared as HMG-CoA reductase inhibitors (no data). Thus, 4-FC₆H₄CH(COPh)CH₂COCHMe₂ (preparation given) was refluxed 48 h with N-aminopyrrolidine.HCl in DMF containing 3A mol. sieves to give pyrrolidinopyrrole II (R = H) which was refluxed overnight with Me₂NCH:CHCHO in MeCN/POCl₃ to give II [R = (E)-CH:CHCHO]. The latter was stirred 30 min with MeCOCH₂CO₂Me in THF which had been treated successively with NaH and BuLi and the product reduced with Et₃B/NaBH₄ to give erythro-III.

L6 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1988:486102 CAPLUS
 DN 109:86102
 TI Succinimide derivatives: chemical structure-anticonvulsant activity relation
 AU Avetisyan, S. A.; Nesunts, N. S.; Buyukyan, N. S.; Mndzhoyan, O. L.; Dzhagatspanyan, I. A.; Nazaryan, I. M.; Akopyan, N. E.
 CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR
 SO Khimiko-Farmatsevticheskii Zhurnal (1988), 22(4), 433-8
 CODEN: KHFZAN; ISSN: 0023-1134
 DT Journal
 LA Russian
 OS CASREACT 109:86102
 GI



- AB Succinimides (I, R = 4-isopropylphenyl, or 4-cyclopropylphenyl) were prepared by the conversion of the corresponding benzyl chlorides to aldehydes, Knoevenagel reaction with di-Et malonate, HCN addition to the resulting ylidene malonates, hydrolysis, amidation-hydrolysis and cyclization. Treatment of I (R = 4-isopropoxyphenyl) with N₂H₄ gave N,N'-bis(p-isopropoxyphenylsuccinimide) (II, R = p-isopropoxyphenyl, n = 0). Similarly, other II (R = p-isopropoxyphenyl and n = 1-10) were prepared. Of all the compds. studied, I (R = 4-isopropylphenyl, or 4-cyclopropylphenyl) and II (R = 4-isopropoxyphenyl and n = 0, 1, 2, 3, or 4) were completely devoid of the ability to prevent nicotinic hyperkinesis and arecoline tremors, as shown in mice. However, I and pufamide showed anticonvulsant activity in relation to corazole and elec. shock. Antagonism to corazole was observed in 50% of the animals at 68 and 90 mg/kg for I (R = 4-isopropylphenyl and 4-cyclopropylphenyl), resp., and to elec. shock at doses 92 and 94 mg/kg. Structure-activity relations are discussed.
- L6 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1972:513682 CAPLUS
 DN 77:113682
 TI Conformations of substituted N,H'-diacylamino succinimides
 AU Foucaud, Andre; Roudaut, Rene; Fayat, Christian
 CS Groupe Rech. Physicochim. Struct., Univ. Rennes, Rennes-Beaulieu, Fr.
 SO Bulletin de la Societe Chimique de France (1972), (5), 1915-20
 CODEN: BSCFAS; ISSN: 0037-8968
 DT Journal
 LA French
 GI For diagram(s), see printed CA Issue.
 AB Potential barriers to rotation for succinimides (I and II) were 19 kcal/mole and 23 kcal/mole, resp. The conformations of several other succinimides were examined by ir and NMR methods.
- L6 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1970:132121 CAPLUS
 DN 72:132121
 TI Thermocatalytic isomerization of 1-formyl-2,3-diphenylcyclopropene and its corresponding azine
 AU Komendantov, M. I.; Kryuchkova, I. K.; Domnin, I. N.
 CS Leningrad. Gos. Univ. im. Zhdanova, Leningrad, USSR
 SO Zhurnal Organicheskoi Khimii (1970), 6(3), 731-2
 CODEN: ZORKAE; ISSN: 0514-7492
 DT Journal
 LA Russian
 AB Heating 1-formyl-2,3-diphenyl-2-cyclopropene (I) with the catalytic amount of Cu stearate (II) at 80° gave quant. yield of 2,3-diphenylfuran. The reaction of I with H₂NNH₂.H₂O gave the corresponding azine which on heating with II isomerized to 2,3,2',3'-tetraphenyl-N,N'-bipyrr ole. A sigmatropic mechanism (G. B. Gille, 1968) is proposed for these 2 isomerizations.
- L6 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1968:486741 CAPLUS
 DN 69:86741
 TI Phenylbutyrolactone derivatives. III. Synthesis of potential antiinflammatory agents related to 3,3'-diphenyl-N,N'-dipyrrolidine-2,2'-dione. I
 AU Cignarella, G.; Fontanella, L.; Aresi, V.; Testa, E.
 CS Lab. Ric., "Lepetit" S.p.A., Milan, Italy
 SO Farmaco, Edizione Scientifica (1968), 23(4), 321-43
 CODEN: FRPSAX; ISSN: 0430-0920
 DT Journal

LA Italian
 OS CASREACT 69:86741
 GI For diagram(s), see printed CA Issue.
 AB A number of derivs. of 3,3'-diphenyl-N,N'-dipyrrolidine-2,2'-dione (I) with potential antiinflammatory properties were synthesized. A series of substituted γ -butyrolactones (II) were obtained from the corresponding aminobutyric acids. Thus, 100 g. β -phenyl- β -cyanopropionic acid in 2 l. AcOH was treated with H at room temperature at 20 atmospheric over 50 g. Pd/C to yield 55% γ -phenyl- β -aminobutyric acid (III), m. 220-1° (H₂O). A solution of 55 g. III in 400 ml. 50% aqueous AcOH was diazotized at -5° with 42 g. NaNO₂ in 110 ml. H₂O, and the mixture stirred 1 hr. and worked up to yield 37% β -phenyl- γ -butyrolactone, b0.4 120-2°, m. 43-5° (petroleum ether) and a small amount of 3-benzyl- β -propiolactone (IV), b0.5 108-10°. Treatment of IV with NaH yielded γ -phenyl- β -hydroxybutyric acid (V). Reduction of Et γ -phenylacetoacetate with NaBH₄ also gave V. Condensation of Et α -cyanohehexanoate (VI) with bis(β -chloroethoxy)methane (VII) gave α -butyl- γ -butyrolactone (VIII). Thus, 372 g. VI was added dropwise at 0° to a solution of 2.2 g. atoms Na in 3 l. EtOH, 173 g. VII added, and the mixture refluxed 4 hrs. and worked up to yield 54% bis(3-cyano-3-carbethoxy-n-heptyloxy)methane (IX), b0.4 195-200°. IX (250 g. in 1 l. EtOH) was treated with 100 ml. concentrated HCl and 500 ml. H₂O, and the mixture refluxed and worked up to give 57% VI. To a solution of 25.3 g. Na in 1 l. liquid NH₃ 97 g. capronitrile was added, the mixture stirred 30 min. and treated with 137 g. BuBr, NH₃ slowly evaporated, and 500 ml. Et₂O added and the mixture refluxed 2 hrs. and worked up to yield 67% dibutylacetoneitrile (X), b25 120-2°. X was condensed with VII and the reaction product hydrolyzed to yield α,α -dibutyl- γ -butyrolactone (XI). Thus, 89 g. X was added to a suspension of 25 g. NaNH₂ in 500 ml. toluene, the mixture stirred 30 min., 50 g. VII added, and the mixture refluxed 2 hrs. and worked up, to yield 51% XI, b0.5 106-10°. Similarly prepared were the following γ -butyrolactones (XII) (R, R1, R2, R3, b.p., and % yield given): H, H, Ph, H, b0.4 120-2° (m. 43-5°), 37; H, H, H, Ph, b0.6 118-20° (m. 36-8°), 80; Bu, H, H, H, b0.5 102°, 57; and Bu, Bu, H, H, b0.5 106-10°, 51. Several Br(CH₂)_mCRR1(CH₂)_nCO₂H (XIII) were prepared. Thus, a solution of 0.2 ml. of the appropriate XII in 150 ml. AcOH was saturated with anhydrous HBr at 5°, and the mixture heated 2 hrs. at 80°, let stand, and worked up to give XIII [R, R1, m, n, m.p., b.p. of the Cl analog (prepared by refluxing XIII 3-5 hrs. in SOCl₂-CHCl₃), and % yield of XIII and its Cl analog given]: Ph, H, 1, 1, 93-5° (ligroine), b0.8 115-17°, 74, 94; Ph, H, 0, 2, 74-6° (ligroine), - (decomposed), 77, 98; Bu, H, 2, 0, b0.6 128-32°, - (b2 93-7°), 70.5, 85; Bu, Bu, 2, 0, -, b0.4 118-22°, 90, 82; and Ph, H, 3, 0, 85-6° (ligroine), b0.4 117-20°, 80, 74. A number of N,N'-bis(ω -bromoacyl)hydrazines [Br(CH₂)_mCHR(CH₂)_nCONH]₂ (XIV) were prepared. Thus, a solution of 0.1 mole XIII in 50 ml. Et₂O (or C₆H₆) was added dropwise at 5° to 0.22 mole N₂H₄.H₂O in H₂O, and the mixture stirred vigorously, left at room temperature 1 hr., and worked up. The following XIV were prepared (R, m, n, m.p., and % yield given): Ph, 1, 1, 133-7°, 88; Et, 0, 2, 128-30°, 50; Bu, 2, 0, 185-8°, 77; and Ph, 3, 0, 204-5°, 82. A suspension of 15 g. N,N'-bis(β -phenyl- γ -bromobutyryl)hydrazine in 70 ml. EtOH was treated with aqueous 10% NaOH at 5-10°, pH adjusted to 5-6 with dilute aqueous HCl, and the solution worked upto give XV (R = R1 = H, R3 = R2 = Ph). The following XV were prepared (R, R1, R2, R3, and b.p. or m.p. given): H, H, Ph, H, 146-7° (EtOH); H, H, H, Ph, 195-6° (EtOH); H, H, H, Ph, 123-4° (EtOH); Bu, H, H, H, b0.6 165-8°; Bu, Bu, H, H, b0.4 158-63°; and cyclohexyl, H, H, H, 160-2° (ligroine). To a solution of 0.03 mole 1-amino-3-phenylpyrrolidin-2-one and 0.03 mole Et₃N in 150 ml. Et₂O, 0.03 mole of

the appropriate XIV was added dropwise at 5-10°, and the mixture refluxed 2 hrs. and worked up to yield the following XVI (R, R1, R2, and m.p. given): Ph, Et, CH2Br, 104-7° (iso-Pr2O); Ph, Pr, CH2Br, 91-5° (iso-Pr2O); Ph, Bu, CH2Br, 73-5° (iso-Pr2O); iso-Pr, iso-Pr, CH2Br, 131-3° (iso-Pr2O); and Ph, H, (CH2)3, 128-30° (iso-PrOH). A suspension of 15.3 g. N,N'-bis(α-phenyl-δ-bromovaleroyl)hydrazine in 100 ml. EtOH was treated with 40 ml. N NaOH, and the mixture stirred 3 hrs. at room temperature and worked up to yield 2.9

g.

XVII (R = Ph, R1 = H, n = m = 3), m. 198-200° (EtOH), and 3.8 g. diastereomer, m. 157-9° (EtOH), was recovered. The following XVII were similarly prepared (R, R1, n, m, and m.p. given): Ph, Et, 2, 1, 76-9° (iso-Pr2O); Ph, Pr, 2, 1, 81-3° (iso-Pr2O); Ph, Bu, 2, 1, 86-9° (iso-Pr2O); iso-Pr, iso-Pr, 2, 1, 79-80° (EtOH); and Ph, H, 2, 3, 158-60° (EtOH). A solution of 30 g. N-methyl-N-(2-phenylpropionyl)-N'-benzalhydrazine and 2.2 g. PhNHNH2 in 150 ml. EtOH was acidified with a few drops concentrated HCl and refluxed 6

hrs.

to yield 77% 1-(N-methyl-α-phenylpropionamido)-3-phenylpyrrolidin-2-one (XVIII), m. 108-10° (EtOH). A solution of 5 g. α-phenyl-γ-bromobutyric acid in 20 ml. Et2O was added dropwise at 0° to 3.41 g. XVIII in 5 ml. Et3N and 50 ml. Et2O, and the mixture stirred 30 min. at 0°, refluxed 1 hr., and worked up to yield 40% 1-(N-methyl-α-phenylpropionamido)-3-phenylpyrrolidin-2-one, m. 122° (Et2O). A solution of 16 g. MeNHNH2 sulfate was treated with 12 g. KOH in MeOH, filtered, treated with 10 g. Me γ-bromo-α-phenylbutyrate, and the mixture refluxed 15 hrs. and worked up to yield 26.4% 1-methyl-4-phenylhexahydropyridaz-3-one, m. 200-2° (EtOH). Spectroscopic data (ir and N.M.R.) of all new compds. are given. 19 references.

L6 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1966:438389 CAPLUS

DN 65:38389

OREF 65:7125g-h,7126a-d

TI Phenylbutyrolactones. I. 3,3'-Diphenyl-N,N'-dipyrrolidine-2,2'-dione. Separation and chemical behavior of the diastereoisomeric forms

AU Cignarella, G.; Pagliarini, G.; Testa, E.

CS Lab. Ric. Lepetit S.p.A., Milan

SO Farmaco, Edizione Scientifica (1966), 21(5), 370-80

CODEN: FRPSAX; ISSN: 0430-0920

DT Journal

LA Italian

GI For diagram(s), see printed CA Issue.

AB cf. preceding abstract PhCH(CH2CH2Br)COCl (I) (26.1 g.) added at 0° to 10 g. 98% N2H4.H2O in 200 ml. H2O and the mixture stirred 1 hr. at 0° gave 70% [PhCH(CH2CH2Br)CONH]2 (II), m. 189-90° (Me2CO).

To a suspension of 33.6 g. II in 400 ml. EtOH, 56 ml. 10% NaOH was added at room temperature and the mixture stirred until solution, acidified to pH 2,

and

diluted with H2O precipitated 75% III as a mixture of diastereoisomers, m. 150-3°, which were isolated as follows: The above mixture (41 g.) crystallized from 600 ml. EtOH gave at room temperature 20.5 g. a compound m. 174-8° which by further crystallization from 400 ml. EtOH gave 14.8 g. the diastereoisomer IIIa, m. 188-90°. The mother liquor of the 1st crystallization, concentrated in vacuo and allowed to stand at room temperature precipitated 12.7 g.

a compound m. 147-51°, which crystallized from 60 ml. EtOH, then from 5 vols. Me2CO gave the diastereoisomer IIIb, m. 158-60°. To confirm the structure, an unambiguous synthesis of III was carried out. Thus, 2.61 g. I added dropwise to a solution of 1.8 g. IV (R = H), 2.02 g. NEt3, and 70 ml. anhydrous Et2O, and the mixture stirred 0.5 hr. gave 73% IV [R =

PhCH(CH₂CH₂Br)CO], m. 138-40° (dilute EtOH), which (2 g.) in aqueous alc. NaOH at room temperature cyclized to give 1.18 g. a mixture of IIIa and IIIb, from which pure diastereoisomers could be isolated by the above described technique. IIIa and IIIb were stable in refluxing 20% HCl. IIIb kept 2 hrs. in 10% aqueous alc. NaOH was transformed into IIIa. IIIa (10 g.), 27 ml. 10% NaOH and 60 ml. EtOH refluxed 5 hrs., diluted with H₂O, the solution concentrated to half volume, unreacted IIIa filtered off, the filtrate adjusted to pH 3, and Et₂O added gave 2.75 g. IV [R = PhCH(CO₂H)CH₂CH₂] (V) as a racemic form (Va), m. 150-2° (EtOH). The mother liquor of Va was concentrated to sep. 0.7 g. a 2nd racemic form of V, m. 110-12° (iso-PrOH) (Vb); addnl. 1.2 g. Vb was isolated from the Et₂O layer, while the aqueous layer adjusted to pH 4 separated 0.4 g. [PhCH(CO₂H)CH₂CH₂NH]₂, m. 154-6° (dilute EtOH). Va refluxed 2 hrs. in PhMe gave 70% IIIb; Vb, similarly treated, gave 85% IIIa. Attempts to sep. the optical antipodes of Va failed. In fact, Va did not give a salt with d-quinine, brucine, and l-ephedrine; the Me ester of Va, m. 109-10°, (from Va with CH₂N₂ in Et₂O) did not give a salt with d-camphorsulfonic acid; the NH₂ group of Va did not give a formyl derivative with 98% HCO₂H at 100° because a cyclization to IIIb took place. IIIa (4.55 g.) added to 0.66 g. Na in 100 ml. liquid NH₃, the mixture stirred 0.5 hr., 6.30 g. MeI added, NH₃ allowed to evaporate, 100 ml. Et₂O added to the residue, and the mixture refluxed 0.5 hr. gave 3.46 g. VII as a diastereoisomer (VIIa), m. 168-70° (iso-PrOH). IIIb (3.95 g.), similarly treated, furnished a mixture of 1.14 g. VIIa and 0.81 g. of a diastereoisomer m. 115-18° (VIIb), which were separated by crystallization from Me₂CO, then from iso-PrOH. VIIa and VIIb refluxed 12 hrs. in 10% aqueous alc. NaOH were recovered

- L6 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1966:406506 CAPLUS
 DN 65:6506
 OREF 65:1224g
 TI Relation of structure to action in some cyclic compounds containing phenylethylamine groups
 AU Starykh, N. T.; Krylov, S. S.; El'tsov, A. V.; Chigarev, A. G.
 SO Farmakologiya i Toksikologiya (Moscow) (1966), 29(1), 25-31
 CODEN: FATOAO; ISSN: 0014-8318
 DT Journal
 LA Russian
 AB A group of compds., 2-phenylpyrrolidine and 2-phenylpiperidine derivs., has adrenergic blockade properties and is capable of blocking central H-choline receptors. The adrenergic-blocking activity of 2-phenylpyrrolidine and 2-phenylpiperidine derivs. is due to the presence of the 2-phenylethylamine group in their heterocyclic structure. The blocking activities of 18 of these derivs. are tabulated.
- L6 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1966:406505 CAPLUS
 DN 65:6505
 OREF 65:1224f-g
 TI The synthesis and pharmacologic evaluation of 8-alkylthioxanthines and related compounds as potential antitumor agents
 AU Goldsmith, Robert Howard
 CS Univ. of Maryland, College Park
 SO (1966) 115 pp. Avail.: Univ. Microfilms (Ann Arbor, Mich.), Order No. 65-4447
 From: Dissertation Abstr. 26(9), 5481
 DT Dissertation
 LA English
 AB Unavailable

L6 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1965:488729 CAPLUS

DN 63:88729

OREF 63:16289g-h,16290a-b

TI Aryl-substituted 1,1'-bipyrryls and their dissociation into radicals

AU Schilffarth, Karlchristian; Zimmermann, Herbert

CS Univ. Munich, Germany

SO Chemische Berichte (1965), 98(10), 3124-32

CODEN: CHBEAM; ISSN: 0009-2940

DT Journal

LA German

GI For diagram(s), see printed CA Issue.

AB A series of octaarylbiopyrryls (I) was prepared from the alkali derivs. of the corresponding H with Br. I dissociated in solution with the formation of deeply colored radicals. The equilibrium between the I and the pyrryls (III) were measured spectroscopically. Anisoin (14-g.) and 30 g. NH₄OAc in 300 cc. AcOH refluxed 5 hrs. with 3.2 g. Zn dust gave 8.2 g. 2,3,4,5-tetrakis(p-methoxyphenyl)pyrrole, m. 193° (EtOH). p-PhC₆H₄CH(OH)COC₆H₄Ph-p (13 g.) and 300 g. NH₄OAc in 1.2 l. AcOH refluxed 3 hrs. with 3 g. Zn dust gave 7.5 g. II (Ar = p-PhC₆H₄) (IV), m. 262° (MePh). II (Ar = Ph) or II (Ar = p-MeOC₆H₄) (3 millimoles) in 100 cc. dry dioxane refluxed 4 hrs. with about 70 mg.-atom K in small pieces and yielded 100% K derivative of H (Ar = Ph) and 53% K derivative of II

(Ar = p-MeOC₆H₄), resp. BzPh (500 mg.) in O-free C₆H₆ shaken 5 min. with 100 g. 1% K-Hg and treated with stirring with 1.8 g. IV yielded 1.25 g. K derivative of IV. The appropriate K derivative (3 millimoles) in 50 cc. dry

Et₂O treated at 0-5° with 2.8 mg.-atom Br in N as a carrier, filtered, concentrated to 10 cc., and diluted with 5 cc. petr. ether gave the corresponding

I (Ar, % purity, and m.p. with decomposition given): Ph, 100, 114°

pPhC₆H₄, 80, 180° p-MeOC₆H₄, 98, 130°. Na derivative (1.5 g.) of

II (R = Ph) in 50 cc. dry Et₂O treated with 0.6 g. Br, filtered, concentrated to

10 cc., and diluted with 10 cc. petr. ether yielded 0.32 g. yellow 1-bromo-2,3,4,5-tetraphenylpyrrole, m. 70° (decomposition) (1:1

Et₂O-petr. ether); it showed photochromic properties. The -log K (dissociation constant), the dissociation enthalpies and entropies in kcal./mole, and the

free enthalpies in cal./degree/mole were determined for the following equilibrium I . rdbllhar. III (Ar and the thermodynamic data given in the indicated order): Ph, 2.99, 15, 4.1, 37; pPhC₆H₄, 2.87, 13, 3.9, 31; p-MeOC₆H₄, 1.6, 7, 2.2, 17. The I are thermochromic in solution as well as in the solid state; they are also photochromic and can be cleaved into III by irradiation. The absorption spectra of III are recorded.

L6 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1962:456245 CAPLUS

DN 57:56245

OREF 57:11188g-i

TI 1,1'-Bipyrrole, 1,1'-biimidazole and their disocn, into radicals

AU Zimmerman, Herbert; Baumgaertel, H.; Bakke, F.

CS Tech. Hochschule, Munich, Germany

SO Angew. Chem. (1961), 73, 808

DT Journal

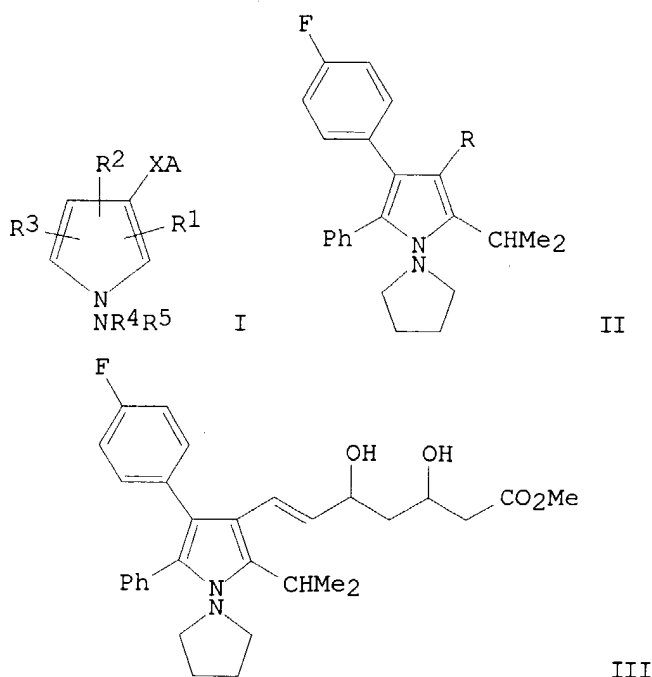
LA Unavailable

AB Reaction of the K salt of 2,3,4,5-tetra-phenylpyrrole in ether under N with Cl gives 60-80% 1,1'-bi(2,3,4,5-tetraphenylpyrrole) (I). I in solution is in equilibrium with the tetraphenylpyrryl radical as shown by its absolute spectrum. In toluene at 20° the equil, const, is 3.8×10^{-4}

mole/l, and ΔH is +14 kcal./mole. Similarly obtained, with iodine in place of Cl, was 1,1'-bi(2,4,5-triphenylimidazole) (II), m. 196°, contg, no active H, also in equil, with its radical. Also prepd, were 1,1'-bi(2-p-tolyl-4,5-diphenyl-imidazole) (III), m. 190° and 1,1'-bi(2-p-methoxyphenyl-4,5-diphenylimidazole) (IV), m. 146°, both of which in solution show equil, with their radicals which are blue to violet in color. The equil, const, k and dissocn, enthalpy H of the imidazoles in toluene are (compound, k, H): II, 0.95×10^{-4} mole/l, at 90°, +19 kcal./mole; III, 1.7×10^{-4} mole/l. at 90°, +15 kcal./mole; IV, 4.6×10^{-4} mole/l, at 60°, +14 kcal./mole.

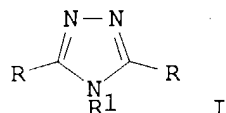
AN 1990:515074 CAPLUS
 DN 113:115074
 TI Preparation of 5-[(1-piperidinopyrrol-3-yl)vinyl]mevalonates and analogs
 as HMG-CoA reductase inhibitors
 IN Angerbauer, Rolf; Huebsch, Walter; Fey, Peter; Bischoff, Hilmar; Petzinna,
 Dieter; Schmidt, Delf; Thomas, Guenter
 PA Bayer A.-G., Fed. Rep. Ger.
 SO Eur. Pat. Appl., 55 pp.
 CODEN: EPXXDW
 DT Patent
 LA German
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 339342	A1	19891102	EP 1989-106241	19890408
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
	DE 3813776	A1	19891102	DE 1988-3813776	19880423
	NO 8901480	A	19891024	NO 1989-1480	19890411
	US 4988711	A	19910129	US 1989-337001	19890412
	AU 8933123	A1	19891026	AU 1989-33123	19890418
	FI 8901892	A	19891024	FI 1989-1892	19890420
	JP 01313460	A2	19891218	JP 1989-100322	19890421
	ZA 8902948	A	19891227	ZA 1989-2948	19890421
	DD 283808	A5	19901024	DD 1989-327859	19890421
	HU 53609	A2	19901128	HU 1989-1941	19890421
	CN 1037145	A	19891115	CN 1989-102670	19890422
	DK 8901963	A	19891024	DK 1989-1963	19890424
PRAI	DE 1988-3813776		19880423		
	IT 1988-22264		19881011		
OS	CASREACT 113:115074; MARPAT 113:115074				
GI					

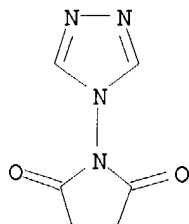


AB The title compds. [I; A = CH(OH)CH₂CR₁₀(OH)CH₂CO₂R₁₁; R₁ = cycloalkyl, (un)substituted alkyl; R₂ = (un)substituted aryl, heteroaryl; R₃-R₅ = H, cycloalkyl, (un)substituted alkyl, aryl, heteroaryl; NR₄R₅ = heterocyclyl; R₁₀ = H, alkyl; R₁₁ = H, alkyl, aryl, aralkyl, cation; X = CH₂CH₂, CH:CH] were prepared as HMG-CoA reductase inhibitors (no data). Thus, 4-FC₆H₄CH(COPh)CH₂COCHMe₂ (preparation given) was refluxed 48 h with N-aminopyrrolidine.HCl in DMF containing 3A mol. sieves to give pyrrolidinopyrrole II (R = H) which was refluxed overnight with Me₂NCH:CHCHO in MeCN/POCl₃ to give II [R = (E)-CH:CHCHO]. The latter was stirred 30 min with MeCOCH₂CO₂Me in THF which had been treated successively with NaH and BuLi and the product reduced with Et₃B/NaBH₄ to give erythro-III.

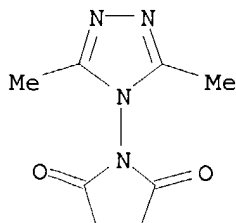
AN 1978:6809 CAPLUS
 DN 88:6809
 TI Synthesis of certain new 4-acylamino-s-triazoles for pharmacological study
 AU Amine, F.; El-Zanfally, S.; Khalifa, M.
 CS Fac. Pharm., Cairo Univ., Cairo, Egypt
 SO Pharmazie (1977), 32(8-9), 538-40
 CODEN: PHARAT; ISSN: 0031-7144
 DT Journal
 LA English
 GI



AB Acylaminotriazoles I (R = H, Me; R1 = 4-ClC6H4CONH, 2-ClC6H4CONH, 4-O2NC6H4CONH) were prepared by acylating I (R1 = NH2) with acyl chlorides. I [R = H, Me; R1 = CH2CH2CO2H, CH2CMe2CO2H, CH2CHPhCO2H, CH2C(:CH2)CO2H, (CH2)3CO2H] were similarly prepared by acylation with anhydrides and were cyclized to I (R = succinimido, as-dimethylsuccinimido, phenylsuccinimido, glutarimido, itaconimido).
 IT **52782-48-6P 64868-83-3P 64868-84-4P**
64868-85-5P 64868-86-6P 64868-87-7P
64868-90-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 52782-48-6 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-(4H-1,2,4-triazol-4-yl)- (9CI) (CA INDEX NAME)

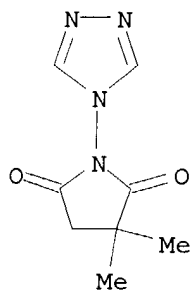


RN 64868-83-3 CAPLUS
 CN 2,5-Pyrrolidinedione, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)- (9CI) (CA INDEX NAME)



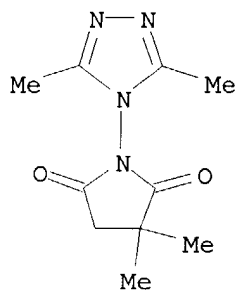
RN 64868-84-4 CAPLUS
 CN 2,5-Pyrrolidinedione, 3,3-dimethyl-1-(4H-1,2,4-triazol-4-yl)- (9CI) (CA

INDEX NAME)



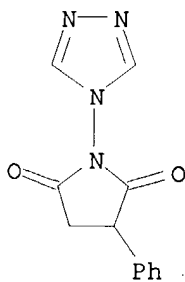
RN 64868-85-5 CAPLUS

CN 2,5-Pyrrolidinedione, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)-3,3-dimethyl-
(9CI) (CA INDEX NAME)



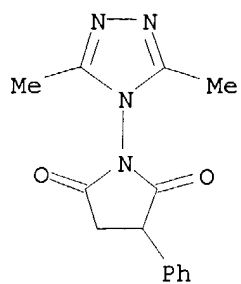
RN 64868-86-6 CAPLUS

CN 2,5-Pyrrolidinedione, 3-phenyl-1-(4H-1,2,4-triazol-4-yl)- (9CI) (CA INDEX
NAME)



RN 64868-87-7 CAPLUS

CN 2,5-Pyrrolidinedione, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)-3-phenyl-
(9CI) (CA INDEX NAME)



RN 64868-90-2 CAPLUS

CN 2,5-Pyrrolidinedione, 1-(3,5-dimethyl-4H-1,2,4-triazol-4-yl)-3-methylene-
(9CI) (CA INDEX NAME)

